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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,167	10/09/2003	Yasuaki Fukada	1248-0674P	6469

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EXAMINER	
NGUYEN, ANTHONY H	
ART UNIT	**PAPER NUMBER**
2854	

NOTIFICATION DATE	DELIVERY MODE
07/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/681,167	FUKADA ET AL.	
	Examiner	Art Unit	
	Anthony H. Nguyen	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

In view of the appeal brief filed on January 31, 2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection for clarifying the issues to forward to the Board of Patent Appeals and Interferences are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Objections

Claims 9 and 14-16 are objected to because there is no proper antecedent basis for "the PS roller" (claim 9 line 3, and also, the abbreviate "PS" has no meaning. Additionally, in claim 14 line 1, the word "he" should obviously be --The--.

Careful review and appropriate correction is required.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6-12 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Noguchi et al. (US 4,978,980).

With respect to claims 1,2 and 17, Noguchi et al. teaches a two-side image forming apparatus having a first transferring path 508 for transferring one-side printed sheet to an output tray 507 via an imaging transcribing section 505 from a supply tray or a sheet storage section 501, a switch-back means 516 located at an immediate upstream of the output tray or the printed sheet storage section 507 for transferring one-side printed sheet to a second transferring path or a duplex path 509 connected to the first transferring path for feeding the one-side printed sheet to an imaging forming means or the imaging transcribing section 505 so that the plurality of sheets are transferred concurrently in the first transferring paths and an intermediate roller 515 provided along the second transferring path 509 for feeding the one-side printed sheet to a register or resister roller 504 (Noguchi et al., Figs. 21-28). While Noguchi et al. et al. does not

specifically state that the intermediate roller which is synchronism with a resumption of rotation of the resist roller, the use of the intermediate roller which is synchronizing with the presumption of rotation of the resist roller is necessary to provide an operative two-side image forming apparatus or a paper jam would occurred.

With respect to claims 6-12, the selection of a desired period or timing for feeding a sheet from a tray or to an image forming device while the switchback means reverses the other sheet to a second path would be obvious through routine experimentation in order to get the maximum number of printed sheets in a shortest time.

Claims 4, 5 and 13-16 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Noguchi et al. in view of Yasui et al.

With respect to claim 4, Noguchi et al. teaches a two-side image forming apparatus having substantially the structure as recited. Noguchi et al. does not clearly teach the resist rollers which are located at the crossing point between the first and second transferring paths. Yasui et al. teaches a two-side image forming apparatus having the resist roller 34a or 34b located at the crossing point between the first conveying path 33 and the second conveying path or the duplex path 92 (Yasui et al., Fig.3). Therefore, in view of the teaching of Yasui et al., it would have been obvious to one of ordinary skill in the art to modify the image forming apparatus of Noguchi et al. by providing the rollers located at the crossing point between the two conveying paths as taught by Yasui et al. to improve the efficiency of controlling the feeding of the first sheet transferring path and the one-side printed sheet to an image transcribing section i.e.,an image printing section. As discussed above, Noguchi et al. et al. does not specifically state that the intermediate roller which is synchronism with a resumption of rotation of the

resist roller, the use of the intermediate roller which is synchronizing with the presumption of rotation of the resist roller is obvious to provide an operative two-side image forming apparatus or a paper jam would occurred.

With respect to claim 5, Figs. 21-28 of Noguchi et al. show the two sheets are transferred concurrently in the overall sheet-transferring path.

With respect to claim 13, Noguchi et al. teaches a two-side image forming apparatus having substantially the structure as recited. Noguchi et al. does not clearly teach the different driving sources for driving the switch-back means and the sheet transfer driving sections. However, the use of different driving sources for driving the switch-back means and the sheet transfer driving sections is well known in the art as exemplified by Yasui et al. For examples, Yasui et al. teaches a drive roller 23 for driving the transfer bell 22, a drive device for the selecting pick 88 (not shown, Yasui et al., col.7 lines 44-50), an inputting gear 310 for driving the discharging roller 307 from a driving source of the main body and the solenoids 317, 320 for driving the selecting picks 315 and 303 as shown in Figs.3 and 17 of Yasui et al. In view of the teaching of Yasui et al., it would have been obvious to one of ordinary skill in the art to modify the image forming apparatus of Noguchi et al. by providing the well known driving sources for driving the switch-back means and sheet-transfer driving section as taught by Yasui et al. to improve the efficiency of transferring sheets in the two-side image forming apparatus if in fact Noguchi et al. does not teach the different sources for independently driving the switch-back means and sheet-transfer driving sections.

With respect to claims 14-16, the selection of a desired location of the detection means on the transferring paths would be obvious through routine experimentation in order to regulate and get the maximum number of printed sheets in a shortest time. Note that Fig.29 of Noguchi et al. shows at least three detection means. For example, the first sheet detection (no numeral reference) in the first transferring path 608 located after the fixing rollers 606 in the feeding direction, a second sheet detection means (d) in the second sheet transferring path for detecting the one-side printed sheet and the third detection means (no numeral reference) near the switch-back means 616 for detecting the present of a sheet. These detection means are monitored by a controller for feeding sheets to provide an operative image forming apparatus of Noguchi et al.

Conclusion

The patents to Goto and Goto et al. are cited to show other structures having obvious similarities to the claimed structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169. The examiner can normally be reached daily from 9 AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen, can be reached on (571) 272-2258. The fax phone number for this Group is (571) 273-8300.

Anthony Nguyen
07/03/07
Patent Examiner
Technology Center 2800